

## WHAT IS CLAIMED IS

1. An extractor comprising a structure that is supported so as to be rotatable, said structure comprising a capturing section for capturing  
5 specific chemical components from a specimen ; and a plurality of reagent containers which are organized for the capturing, and which hold liquid which will flow through the capturing section, wherein :

the plurality of reagent containers which are connected to the capturing section comprise a liquid outlet port which is provided at the  
10 side opposite to the rotation center side ;

the capturing section is held in the structure , closer to the outer periphery side than the plurality of reagent container; and

a flow path is provided which has a bent flow path portion which returns to the rotation center side, and which at a particular stage  
15 prevents the flow of liquid from the reagent containers which are connected to the capturing sections, and at another stage, forms the liquid flow due to the centrifugal force from the rotation of the structure.

2. An extractor comprising a structure that is supported so as to be rotatable, said structure comprising a capturing section for capturing  
20 specific chemical components from a specimen and a plurality of reagent containers which are organized for the capturing, and which hold liquid which will flow through the capturing section, wherein :

the plurality of reagent containers which are connected to the  
25 capturing section comprise a liquid outlet port which is provided at a side

opposite to the rotation center side;

the capturing section is held in the structure , closer to the outer periphery side than the plurality of reagent container;

5 a flow path is provided, which connects the capturing section and reagent containers which are connected to the capturing section and forms a reagent flow from the reagent containers to the capturing section using centrifugal force, and without providing valves.

3. The extractor of Claim 1 or 2, wherein the reagent container is  
10 sealed with a cover, and comprises a hole forming device for forming vent holes in said cover.

4. An extractor comprising a structure that is supported so as to be rotatable, said structure comprising a capturing section for capturing  
15 specific chemical components from a specimen , and a plurality of reagent containers which are organized for the capturing, and which hold liquid which will flow through the capturing section, wherein:

the plurality of reagent containers which are connected to the capturing section comprise a liquid outlet port which is provided at a side  
20 opposite to the rotation center side;

the capturing section is held in the structure , closer to the outer periphery side than the plurality of reagent container; and

a dispensing mechanism for dispensing the liquid to the reagent containers is provided,

25 and the capturing section and reagent containers which are

connected to the capturing section are connected by a flow path in which there are no valves.

5. A chemical analyzer comprising a structure that is supported so as to be rotatable, said structure comprising a capturing section for capturing specific chemical components from a specimen and specimen containers, and reagent containers including washing solution containers, wherein:

the reagent container and washing solution container comprise a liquid outlet port which is provided at a side opposite to the rotation center side;

the capturing section is held in the structure, closer to the outer periphery side than the specimen containers and the reagent containers which include the washing solution containers;

a flow path is provided which connects the capturing section, with the washing solution containers and with other reagent containers;

at the outer periphery side and at the downstream side of the capturing section, analysis sections are provided which are connected by a flow path which forms the flow of amplifying solution due to centrifugal force without using valves, in an amplifying solution storage container for introducing amplifying solution for amplification and detection, and the flow path outlet port from the amplifying solution storage container to the analysis section is provided at the outer periphery side.

6. The chemical analyzer of Claim 5, wherein the flow path which forms the amplifying solution flow using centrifugal force and without using

valves has a bent flow path portion which is returned closer to the rotation center side than the position of the flow path outlet port of the amplifying solution storage container.

- 5        7.    The chemical analyzer of Claim 5 or 6, wherein the specimen containers and the reagent containers which include the washing solution containers are sealed with a cover, and comprise a hole forming device for forming a vent hole in said cover.
- 10      8.    The chemical analyzer of Claim 5 or 6, wherein the reagent containers including the washing solution containers have a dispensing mechanism.
- 15      9.    The chemical analyzer of any of Claims 5 to 8, wherein the discharge fluid storage container is arranged along the periphery and connected to the analysis section.
- 20      10.    A chemical analyzer comprising a structure that is supported so as to be rotatable, said structure comprising a capturing section for capturing specific nucleic acids from a specimen, specimen containers, serum storage containers, mixture containers in which reagents and specimens are mixed, and reagent containers which include washing solution containers, wherein:  
        the specimen container, the mixture container, and the washing  
25      solution container comprise a liquid outlet port which is provided at a n

outer periphery side opposite to the rotation center side ;

the nucleic acid capturing section is held in the structure closer to the outer periphery side than the specimen containers, the reagent containers, and the washing solution containers;

5 a flow path is provided which connects the nucleic acid capturing section with the washing solution containers and the other reagent containers; and

at the outer periphery side and at the downstream side of the capturing section, analysis sections are provided , which are connected by  
10 a flow path which forms the flow of amplifying solution due to centrifugal force without using valves in an amplifying solution storage container for introducing amplifying solution for amplification and detection, and the flow path outlet port from the amplifying solution storage container to the analysis section is provided at the outer periphery side.

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11. The chemical analyzer of Claim 10, wherein the flow path which forms the flow of amplifying solution due to centrifugal force without using valves has a bent flow path portion which is returned closer to the rotation center side than the position of the flow path outlet port of the amplifying  
20 solution storage container.

12. The chemical analyzer of Claim 10 or 11, wherein the specimen container and the reagent containers which include the washing solution containers are sealed with a cover, and comprise a hole forming device  
25 for forming a vent hole in said cover.

13. The chemical analyzer of Claim 10 or 11, wherein the reagent containers which include the washing solution containers have a dispensing mechanism.

5 14. The chemical analyzer of any of Claims 10 to 12, wherein discharge fluid storage containers are arranged along the periphery and are connected to the analysis section.

10 15. A chemical analyzer comprising a structure that is supported so as to be rotatable, said structure comprising a nucleic acid capturing section for capturing specific nucleic acids from a specimen, specimen containers, mixture containers in which reagents and specimens are mixed, and reagent containers which include washing solution containers, wherein:

15 the specimen containers, the mixture containers and the washing solution containers comprise a liquid outlet port which is provided at the outer periphery side opposite to the rotation center side ;

20 the nucleic acid capturing section is held in the structure, closer to the outer periphery side than the specimen containers, the mixture containers, and the reagent containers which include the washing solution containers,

25 a flow path is provided which connects the nucleic acid capturing section with the mixture containers and the washing solution containers, and has a bent flow path portion which returns closer to the rotation center side than the outlet port of the mixture container and the washing solution container respectively.

16. A chemical analyzer comprising a structure that is supported so as to be rotatable, said structure comprising a nucleic acid capturing section for capturing specific nucleic acids from a specimen, specimen containers, mixture containers in which reagents and specimens are mixed, and

5 reagent containers which include washing solution containers, wherein:

the specimen containers, and the reagent containers which include the washing solution containers and are sealed with a cover, and comprise a liquid outlet port which is provided at the outer periphery side opposite to the rotation center side;

10 the nucleic acid capturing section is held in the structure, closer to the outer periphery side than the specimen containers, the mixture containers, and reagent containers including the washing solution containers and comprises a hole forming device for forming a vent hole in the cover of the specimen container, the washing solution container and  
15 the other reagent containers; and

the nucleic acid capturing section and the mixture containers and the washing solution containers, and the other reagent containers, are connected by a flow path, and the flow path has a bent flow path portion which returns closer to the rotation center side than the outlet port of the  
20 washing solution containers and the other reagent container respectively, and which before vent hole formation prevents the flow of liquid from the washing solution containers, and the other reagent container, and after hole formation, forms a liquid flow due to the centrifugal force from the rotation of the structure, and prevents the flow of liquid remaining in the  
25 flow path from flowing to the nucleic acid capturing section.

17. A chemical analyzer comprising a structure that is supported so as to be rotatable, said structure comprising a nucleic acid capturing section for capturing specific nucleic acids from a specimen, specimen containers, mixture containers in which reagents and specimens are mixed, and reagent containers which include washing solution containers, wherein:

the mixture containers, the washing solution containers and the other reagent containers comprise a liquid outlet port which is provided at the outer periphery side opposite to the rotation center side ;

the nucleic acid capturing section is held in the structure, closer to the outer periphery side than the specimen containers, and the mixture container, and reagent containers including the washing solution containers and;

the washing solution containers and the other reagent containers have a dispensing mechanism for dispensing liquid ; and

the nucleic acid capturing section and the mixture containers, the washing solution containers and the other reagent containers are connected by a flow path.

18. An analyzer comprising a sector-shaped outer frame container and a cover for covering the outer frame container, and specimen containers and reagent containers are provided inside of the outer frame container, and the outlet portion of each of the containers is provided at the outer periphery side of the sector shape, and analysis sections are provided closer to the outer periphery side than all of the reagent container outlet portions, and discharge fluid storage containers are provided along the



outer periphery at the outer periphery side of the analysis section.

19. The analyzer of Claim 18, wherein the storage containers for the separated chemical substance are inside the outer frame container , and  
5 arranged from the sector-shaped main portion toward the outer periphery side, on one of the left and right sides of the specimen, and some of the reagent containers excluding the storage containers are lined up on the other side, and the remaining containers are disposed on the one side or on the other side.

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20. The analyzer of Claim 19, wherein reagent temporary holding containers are provided on the outer periphery side of the reagent containers.

15 21. An analyzer comprising an outer frame container and a cover for covering the outer frame container, and inside the outer frame container are provided, a capturing section for capturing specific chemical components from a specimen, a reagent container, and a analysis reagent container, and the outlet portion for each of the reagent  
20 containers and the analysis reagent container s is provided at the analysis section side, and the analysis section is provided at positions on the outer periphery side of all the reagent containers and the analysis reagent containers, and a discharge fluid storage container is provided at the outer periphery side of the analysis section, and a flow path which  
25 connects the reagent container and the capturing section, and the

analysis reagent containers and the analysis section, has a bent portion which returns closer to the respective reagent container or analysis reagent container side than the outlet portion of each of the reagent containers and the analysis reagent containers.

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22. A chemical analysis method which uses at least 2 analyzers comprising an outer frame container and a cover for covering the outer frame container; and provided inside the outer frame container, are a capturing section for capturing specific chemical components from a specimen; a reagent container; and an analysis reagent container; and the outlet portion of each of the reagent containers and the analysis reagent containers is provided at the analysis section side, and the analysis section is provided at positions on the outer periphery side of all the reagent containers and the analysis reagent containers, and discharge fluid storage containers are provided at the outer periphery side of the analysis section, and a flow path is formed which connects the reagent container and the capturing section, and the analysis reagent containers and the analysis section, and at least one analyzer is loaded in a structure in which the reagent is loaded in a reagent container and then sealed and driven to rotate, and an analysis method is carried out by the reagent being loaded in the reagent container, and the container being sealed and driven to rotate.

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23. An extractor comprising a structure that is supported so as to be rotatable, said structure comprising a capturing section for capturing

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specific chemical components from a specimen , and a plurality of reagent containers which are organized for the capturing, and which hold liquid which will flow through the capturing section, wherein:

the plurality of reagent containers which are connected to the  
5 capturing section comprise a liquid outlet port which is provided at the side opposite to the rotation center side ;

the capturing section is held in the structure closer to the outer periphery side than the plurality of reagent container; and

a reagent control portion is provided upstream of the reagent outlet  
10 port which controls the flow of the reagent and which at a particular stage prevents the flow of liquid from the reagent containers which are connected to the capturing section to the capturing sections, and at another stage, forms the liquid flow due to the centrifugal force from the rotation of the structure .

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24. An extractor comprising a structure that is supported so as to be rotatable, said structure comprising a capturing section for capturing specific chemical substances from a specimen, and a plurality of reagent containers which are organized for the capturing, and which hold liquid  
20 which will flow through the capturing section, wherein the reagent containers separately hold a number of washing solutions and eluents as the reagent, and comprises a reagent outlet for feeding each reagent to the capturing section which is positioned at the rotation center side to the same extent as the reagent outlet of the washing solution to be used in  
25 the subsequent washing step.

25. The extractor of Claim 23 or 24, wherein each of the reagent containers communicates with the inside of the structure.

26. The extractor of Claim 23 or 24, wherein light is irradiated in the  
5 reagent container to heat the reagent.